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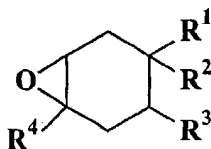
sketch 1-30

CLAIM OR CLAIMS:

WHAT IS CLAIMED IS:

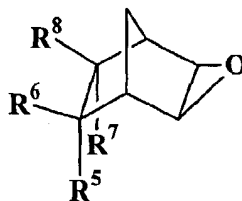
- 5 1. A functional fluid composition that generates reduced levels of carboxylic acid during use comprising:

- (a) a basestock comprising a phosphate ester, and
(b) at least one acid scavenger selected from
(i) epoxides of the formula



(I)

- (ii) epoxides of the formula

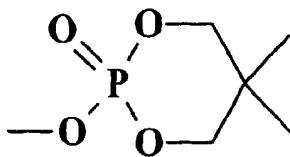


(II), or

- (iii) mixtures thereof;

wherein R¹, R² and R³ are independently selected from H, -(CH₂)_n-R and -C(O)-R¹², and wherein one or two of R¹, R² and R³ are -C(O)-R¹² or -(CH₂)_n-R; R⁴ is selected from H or

- 20 -CH₃; and R⁵, R⁶, R⁷ and R⁸ are independently selected from H, -(CH₂)_n-R and -C(O)-R¹², and wherein up to two of R⁵, R⁶, R⁷ and R⁸ are -C(O)-R¹² or -(CH₂)_n-R; wherein R is selected from H, a linear or branched alkyl group having 1 to 12 carbon atoms, an arylalkyl group having 7 to 12 carbon atoms, -O-R¹⁰, -O-R⁹-O-R¹⁰,



, or $-\text{Si}(\text{OR}^{11})_3$; R^{12} is selected from a linear or branched alkyl group having 1 to 12 carbon atoms, or an arylalkyl group having 7 to 12 carbon atoms, n is an integer from 1 to 4, R^9 is an alkylene group having 2 to 6 carbon atoms, R^{10} is an alkyl group having 1 to 12 carbon atoms, R^{11} is an alkyl group having 1 to 8 carbon atoms, and R^{12} is an alkyl group having 1 to 12 carbon atoms.

2. The composition of claim 1 wherein said acid scavenger is an epoxide of formula (I).
- 10 3. The composition of claim 2 wherein one of R^1 , R^2 and R^3 is $-\text{C}(\text{O})-\text{R}^{12}$ or $-(\text{CH}_2)_n-\text{R}$.
4. The composition of claim 3 wherein one of R^1 , R^2 and R^3 is $-(\text{CH}_2)_n-\text{R}$.
5. The composition of claim 4 wherein R is selected from a linear or branched alkyl group having 1 to 12 carbon atoms, an arylalkyl group having 7 to 12 carbon atoms, $-\text{O}-\text{R}^{10}$, $-\text{O}-\text{R}^9-\text{O}-\text{R}^{10}$.
- 15 6. The composition of claim 5 wherein n is 1.
7. The composition of claim 2 wherein R^1 and R^2 are $-\text{C}(\text{O})-\text{R}^{12}$ or $-(\text{CH}_2)_n-\text{R}$.
- 20 8. The composition of claim 7 wherein R^1 and R^2 is $-(\text{CH}_2)_n-\text{R}$.
9. The composition of claim 8 wherein R is selected from a linear or branched alkyl group having 1 to 12 carbon atoms, an arylalkyl group having 7 to 12 carbon atoms, $-\text{O}-\text{R}^{10}$, $-\text{O}-\text{R}^9-\text{O}-\text{R}^{10}$.
- 25 10. The composition of claim 9 wherein n is 1.
11. The composition of claim 2 wherein R^1 and R^3 are $-\text{C}(\text{O})-\text{R}^{12}$ or $-(\text{CH}_2)_n-\text{R}$.
12. The composition of claim 11 wherein R^1 and R^3 is $-(\text{CH}_2)_n-\text{R}$.

13. The composition of claim 12 wherein n is 1.

14. The composition of claim 2 wherein R^4 is H.

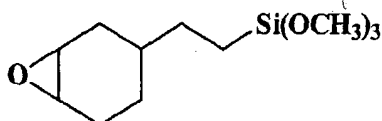
15. The composition of claim 1 wherein said acid scavenger is an epoxide of formula (II).

5 16. The composition of claim 15 wherein one of R^5, R^6, R^7 and R^8 is $-C(O)-R^{12}$ or $-(CH_2)_n-R$.

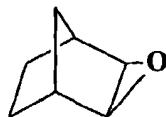
17. The composition of claim 16 wherein one of R^5, R^6, R^7 and R^8 is $-(CH_2)_n-R$.

18. The composition of claim 17 wherein n is 1.

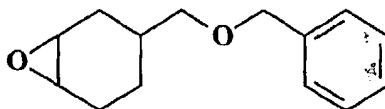
10 19. The composition of claim 1 wherein said acid scavenger is



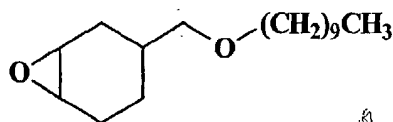
20. The composition of claim 15 wherein said acid scavenger is:



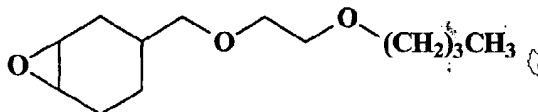
15 21. The composition of claim 6 wherein said acid scavenger is



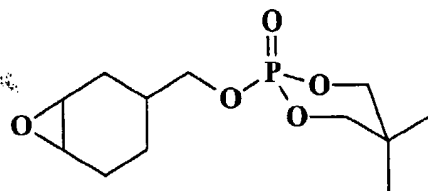
22. The composition of claim 6 wherein said acid scavenger is:



20 23. The composition of claim 6 wherein said acid scavenger is:

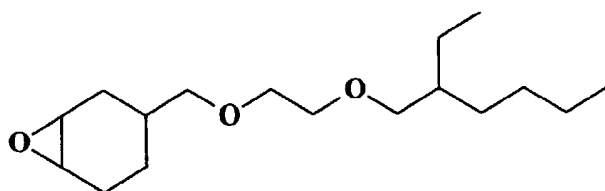


24. The composition of claim 1 wherein said acid scavenger is:

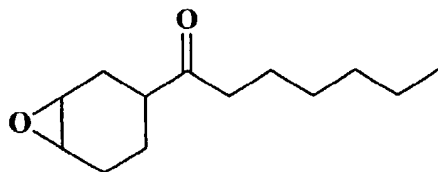


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25. The composition of claim 6 wherein said acid scavenger is:

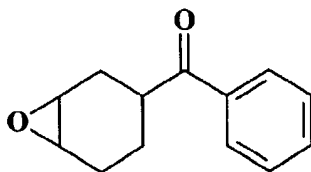


26. The composition of claim 3 wherein said acid scavenger is:

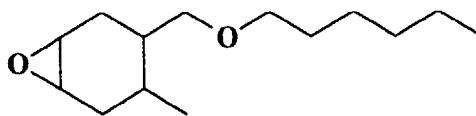


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27. The composition of claim 3 wherein said acid scavenger is:

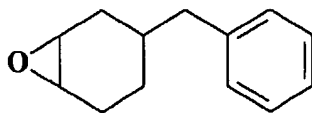


28. The composition of claim 13 wherein said acid scavenger is:



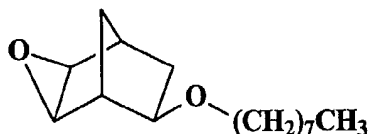
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29. The composition of claim 6 wherein said acid scavenger is:

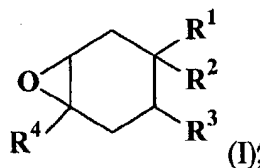


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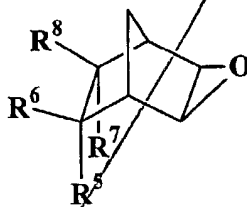
- 5 30. The composition of claim 18 wherein said acid scavenger is:



31. A method for reducing the production of carboxylic acid during use of a functional fluid comprising (a) a basestock comprising a phosphate ester, and
10 (b) at least one acid scavenger, said method comprising admixing in said functional fluid at least one acid scavenger selected from epoxides of the formula:



epoxides of the formula:



- 15 mixtures thereof; wherein R^1 , R^2 and R^3 are independently selected from H, $-(CH_2)_n-R$ and $-C(O)-R^{12}$, and wherein one or two of R^1 , R^2 and R^3 are $-C(O)-R^{12}$ or $-(CH_2)_n-R$; R^4 is selected from H or $-CH_3$; and R^5 , R^6 , R^7 and R^8 are independently selected from H, $-(CH_2)_n-R$ and $-C(O)-R^{12}$, and wherein up to two of R^5 , R^6 , R^7 and R^8 are $-C(O)-R^{12}$ or $-(CH_2)_n-R$; wherein R is selected from H, a linear or branched alkyl group having 1 to
20 12 carbon atoms, an arylalkyl group having 7 to 12 carbon atoms, $-O-R^{10}$, $-O-R^9-O-R^{10}$,